

**CLAIM AMENDMENTS**

This listing of claims will replace all prior versions and listings of claims in the application.

1     1.     (Currently Amended) A content switch managed by a network provider that  
2     routes packets associated with a document to one of a plurality of application  
3     providers, wherein each application provider is a trusted customer of the network  
4     provider, in a computer based communications system using instructions recorded  
5     on a computer-readable storage medium, the storage medium comprising:

6             instructions in the content switch that send ~~a~~ the document to a parser, the  
7     document referencing a location of a corresponding schema;

8             instructions in the parser that fetch ~~a schema~~ the corresponding schema from  
9     the location ~~associated with the packets, wherein the~~ the fetched schema comprises:

10                 a plurality of elements, wherein a particular element in the fetched  
11                 schema is also found in the sent document.

12                 a particular routing rule that redirects the packets to a particular  
13                 server when a value of the particular element in the sent document matches  
14                 a predefined value of the particular element in the fetched schema, and  
15                 ~~containing routing rules, the routing rules~~



16           a default routing rule that redirects the packets to a default server  
17           when the value of the particular element in the sent document does not  
18           match the predefined value of the particular element in the fetched schema  
19           ~~providing a default action when the document does not match the routing~~  
20           ~~rules;~~

21           instructions in the parser that validate the sent document according to the  
22           fetched schema;

23           instructions in the parser that pass the validated document to a routing  
24           instruction processor;

25           instructions that interpret the routing rules in the schema, wherein the  
26           content switch executes the routing rules; and

27           instructions in the content switch that use the interpreted routing rules to  
28           redirect the packets associated with the document to a ~~specified either the~~  
29           ~~particular server or the default~~ server, ~~wherein: each application provider, defines~~  
30           ~~switching policies, and administrative domains of the content switch and~~  
31           ~~application servers are separated.~~

1           2.       (Previously Presented) The content switch as recited in claim 1, further  
2           comprising:

3           instructions that parse Extensible Markup Language (XML).



1 3. (Currently Amended) A method of carrying out content switching ~~in~~ for a  
2 plurality of application providers in a network provider of a computer-based  
3 communications system, wherein each application provider is a trusted customer of  
4 the network provider, that uses instructions recorded on a computer-readable  
5 storage medium, the medium comprising:

6 instructions that add parsing capabilities to a content switch;

7 instructions that add routing ~~information~~ rules to a schema associated with  
8 packets and a document, wherein the schema comprises:

9 a plurality of elements, wherein a particular element in the schema is  
10 also found in the document,

11 a particular routing rule that redirects the packets to a particular  
12 server when a value of the particular element in the document matches a  
13 predefined value of the particular element in the schema, and

14 a default routing rule that redirects the packets to a default server  
15 when the value of the particular element in the document does not match the  
16 predefined value of the particular element in the schema;

17 ~~the routing information providing a default action when a document does not~~  
18 ~~match the routing information;~~

19 instructions that direct the content switch to fetch the schema to determine a  
20 the routing action to be taken on the packets associated with a ~~the~~ document



21 written according to the fetches schema and containing the reference to the fetched  
22 schema, wherein the determination is made by applying the routing rules from the  
23 schema to elements parsed from the document; and

24 instructions that route the packets according to the determined routing  
25 action, wherein each application provider, as the trusted customer of the  
26 network provider, defines switching policies, and administrative domains of the  
27 content switch and application servers are separated.

1 4. (Previously Presented) The method as recited in claim 3, further comprising:  
2 instructions that use Extensible Markup Language (XML).

1 5. (Currently Amended) A system that routes traffic to application providers in  
2 a network provider of a computer based communications network using instructions  
3 recorded on a computer-readable storage medium, wherein each application  
4 provider is a trusted customer of the network provider, the medium comprising:

5 instructions that add parsing capabilities to a content switch;

6 instructions that add routing ~~information~~ rules to a schema associated with  
7 packets and a document, wherein the schema comprises:

8 a plurality of elements, wherein a particular element in the schema is  
9 also found in the document.



10           a particular routing rule that redirects the packets to a particular  
11           server when a value of the particular element in the document matches a  
12           predefined value of the particular element in the schema, and

13           a default routing rule that redirects the packets to a default server  
14           when the value of the particular element in the document does not match the  
15           predefined value of the particular element in the schema~~the routing~~  
16           ~~information providing a default action when a document does not match the~~  
17           ~~routing information;~~

18           instructions that direct the content switch to fetch the schema, interpret the  
19           routing rules in ~~a~~the document containing the reference to the schema and written  
20           ~~according to a~~ in the language of the schema, ~~associated with a packet and apply~~  
21           the routing rules to elements in the network; and

22           instructions that determine a routing action to be performed on the packets  
23           from a packet flow associated with the document, wherein~~[[:]]~~ each application  
24           provider, as the trusted customer of the network provider, defines switching  
25           policies, and administrative domains of the content switch and application servers  
26           are separated.

1       6.       (Previously Presented) The system as recited in claim 5, further comprising:  
2           instructions that parse Extensible Markup Language (XML).



1 7. (Currently Amended) A computer program schema comprising instructions  
2 stored on a computer-readable storage medium in a network provider of a computer  
3 based communications system, the medium comprising:

4 instructions that add parsing capabilities to a content switch;

5 instructions that add routing ~~information rules~~ to a schema associated with  
6 packets and a document, wherein the schema comprises:

7 a plurality of elements, wherein a particular element in the schema is  
8 also found in the document.

9 a particular routing rule that redirects the packets to a particular  
10 server when a value of the particular element in the document matches a  
11 predefined value of the particular element in the schema, and

12 a default routing rule that redirects the packets to a default server  
13 when the value of the particular element in the document does not match the  
14 predefined value of the particular element in the schema ~~the routing~~  
15 ~~information providing a default action when a document does not match the~~  
16 ~~routing information;~~

17 instructions that enable a particular application provider to specify the  
18 routing rules;

19 instructions that direct the content switch to fetch the schema to provide  
20 routing actions to be taken on the packets associated with a ~~the~~ document



21 | containing the reference to the schema and written in the language of the schema;

22 | and

23 | instructions that route the packets to the application providers, wherein[[:]

24 | each application provider is a trusted customer of the network provider that defines

25 | switching policies, and administrative domains of the content switch and

26 | application servers are separated.

1 | 8. (Canceled).

1 | 9. (New) The content switch of claim 1, wherein:

2 | the fetched schema comprises a plurality of particular routing rules and a  
3 | plurality of predefined values of the particular element in the fetched schema,

4 | each of the particular routing rules redirects the packets to a different server,

5 | and

6 | each of the particular routing rules corresponds uniquely to one of the  
7 | predefined values.

1 | 10. (New) The method of claim 3, wherein:

2 | the schema comprises a plurality of particular routing rules and a plurality of  
3 | predefined values of the particular element in the schema,



4 each of the particular routing rules redirects the packets to a different server,

5 and

6 each of the particular routing rules corresponds uniquely to one of the

7 predefined values.

1 11. (New) The system of claim 5, wherein:

2 the schema comprises a plurality of particular routing rules and a plurality of

3 predefined values of the particular element in the schema,

4 each of the particular routing rules redirects the packets to a different server,

5 and

6 each of the particular routing rules corresponds uniquely to one of the

7 predefined values.

1 12. (New) The schema of claim 7, wherein:

2 the schema comprises a plurality of particular routing rules and a plurality of

3 predefined values of the particular element in the schema,

4 each of the particular routing rules redirects the packets to a different server,

5 and

6 each of the particular routing rules corresponds uniquely to one of the

7 predefined values.



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